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**SECRETARY, BOARD OF
OIL, GAS & MINING**

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Earth Energy Resources, Inc.*

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

LIVING RIVERS,

Petitioner,

v.

DIVISION OF OIL, GAS AND MINING,

Respondent,

EARTH ENERGY RESOURCES, INC.,

Intervenor/Respondent.

**EARTH ENERGY RESOURCES, INC.'S
IDENTIFICATION OF WITNESSES**

Docket No. 2010-027

Cause No. M/047/0090 A

Pursuant to the Pre-hearing Stipulation to Order for Discovery and Other Pre-hearing Matters, Intervenor/Respondent Earth Energy Resources, Inc. ("Earth Energy") hereby provides the following list of potential witnesses it may call in the above captioned matter.

Robert Bayer, JBR Environmental Consultants, Inc. – Fact and Expert Witness
Karla Knoop, JBR Environmental Consultants, Inc. – Fact and Expert Witness
Barclay Cuthbert, Earth Energy Resources, Inc. – Fact Witness

Any person identified by Petitioner Living Rivers or Respondent Division of Oil Gas and Mining in their respective witness lists

CVs for witnesses providing expert testimony are attached as Exhibits A and B respectively.

RESPECTFULLY SUBMITTED this 30th day of December, 2010.

HOLME ROBERTS & OWEN LLP

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A. John Davis
Christopher R. Hogle
M. Benjamin Machlis
Attorneys for Earth Energy Resources, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 30th day of December, 2010, a true and correct copy of the foregoing EARTH ENERGY RESOURCES, INC.'S IDENTIFICATION OF WITNESSES was served via email, as follows:

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A handwritten signature in black ink, appearing to be 'M. Benjamin Machlis', is written over a horizontal line. The signature is stylized with large, sweeping loops.

M. Benjamin Machlis

EXHIBIT A



creating solutions for today's environment

Robert Bayer, PG
Managing Principal/Geologist-Geochemist
Years of Experience: 37

Relevant Experience

Mr. Bayer has more than three decades of experience in the environmental and minerals industries. He is a founder, shareholder, and Managing Principal of JBR Environmental Consultants, Inc. and is responsible for overall management of the company. His environmental industry experience includes the following: management of multimedia permitting projects for coal, ferrous and non-ferrous metallic and non-metallic mining operations, as well as for industrial facilities; managing and conducting environmental investigations, and management and technical review of environmental due diligence and audit projects. In addition, he is currently involved in permitting projects for both oil shale and tar sand projects on the Colorado Plateau. His due diligence experience includes: mine and mills; roasters, smelters, and refineries; oil and gas fields, gathering systems, and natural gas plants; and land disturbed and affected by abandoned mines and related facilities.

His environmental investigation experience has included investigations of sites contaminated by heavy metals; PCBs; fuels and lubricants; solvents; and asbestos. He has conducted geochemical investigations of contaminated soils, fill, and related media as well as hydrogeochemical investigations of contaminated groundwater and surface water. Subsequent to investigations, Mr. Bayer has managed remediation planning, design and cost estimate preparation for numerous facilities in the western U.S. He has extensive regulatory permitting and compliance experience involving state programs authorized under federal legislation including the Clean Air Act (CAA), the Clean Water Act (CWA), the National Environmental Policy Act (NEPA) and the Resource Conservation and Recovery Act (RCRA). He has provided expert witness services to private and public sector clients, including the U.S. Department of Justice and the U.S. Attorney for the State of Utah.

MINE & INDUSTRIAL PERMITTING & COMPLIANCE

Mr. Bayer managed and participated in more than a dozen mine and industrial permitting projects in multiple states, including Utah and Nevada. Mine projects have included coal; gold; copper; lead/zinc and non-metallic minerals aggregate mining; base metal smelting; precious metals roasting; chemical manufacturing; and fabricating plants. Permitting experience in Utah and Nevada includes participation in and management of the preparation of permit application packages for the Cyanco Winnemucca Sodium Cyanide Plant; Barrick Mercur Gold Mine; Barrick Bullfrog & Goldstrike Mines;

Areas of Expertise

Mine & Industrial Permitting & Compliance
Geochemical & Hydrogeochemical Investigations
Ground Water Studies
Oil & Gas Exploration & Development Impact Assessment
Oil Shale & Tar Sands Permitting & Pre-Feasibility
Site Investigation, Remediation & Closure Planning
Auditing & Due Diligence

Education

- M.S., Geology, University of Tennessee, 1974
- B.S., Geology, Marietta College, 1971

Professional History

- JBR Environmental Consultants, Inc., Managing Principal, Vice President, Geologist-Geochemist, 1985 - Present
- Getty Mining Company, Exploration Geologist, 1975 - 1985
- Division of Water Quality Control, Geologist, 1973 - 1974
- Conoco Minerals, Geologist, 1973 - 1973
- University of Tennessee, Geology Department, Research Assistant, 1972 - 1973

Licenses

- Professional Geologist, UT
- Professional Geologist, WY

Certifications

- Asbestos Inspector/Management Planner, UT

Supplemental Training

- Climate Change Science & Policy
- Human Health and Ecological Risk Assessment
- Ground Water Geochemistry
- Oil and Gas Law and Regulation
- Geochemical Modeling (PHREEQE)
- NEPA and Federal Land Development
- Advanced Business Mgmt. Education

Affiliations

- Advisory Board, KUER Public Radio Station (University of Utah)
- Association of Ground Water Scientists and Engineers
- Board of Directors, Utah Mining Association
- Chair, Environmental Committee, Utah Mining Association (UMA)
- Member, UMA Oil Shale & Tar Sands Committee
- Rocky Mountain Mineral Law Foundation
- Society for Mining Metallurgy and Exploration, past section chair
- Society of Petroleum Engineers
- Utah Board of Oil, Gas, and Mining (completed 2nd and final 4-year term in February)



SF Phosphates Vernal Phosphate Mine; Barneys Canyon Gold Mine; Tenneco/USMX Goldstrike Mine; Inspiration Gold; Topaz Beryllium Project; Brush Resources/Topaz Beryllium Mine; 6 Utah coal mines; and ongoing projects involving copper, precious metals, oil shale, and tar sands in operation or in development. Services provided on these projects have included: preparation of mining and reclamation plans; ground water, construction permits, and storm water permits; air quality emission inventories and construction permits; and various other state agency and local government permits. He has assisted clients with compliance issues related to air quality permits, ground water discharges, applicability of storm water regulations to mining sites, discharge limitations, site-specific ground water protection limits, and interpretation of water quality data collected in permit-required monitoring activities.

GEOCHEMICAL & HYDROGEOCHEMICAL INVESTIGATIONS

Mr. Bayer has conducted geochemical and hydrogeochemical investigations at contaminated sites, sites with suspected contamination, and predictive studies for assessment of impacts by proposed mining operations. Types of sites investigated have included: undeveloped property where past contamination was suspected or mobilization of naturally occurring metals in soils and alluvium by future industrial activities was a concern; evaluation of potential impacts to soil and ground water from proposed phosphate mining operations, former landfill sites contaminated by volatile and semi-volatile organic compounds and metals with potential impacts to surface and ground water; former and active industrial sites where contamination of soils by metals, solvents and fuels was a concern; and abandoned metallic mining and milling sites with concerns for contamination by acid-rock drainage, metals, cyanides, and milling reagents. The types of investigations that Mr. Bayer has planned, conducted, and directed include: numerous geochemical and hydrogeological sampling projects in soil, bedrock, and ground water; evaluations of geochemical and hydrogeochemical data, including interpretation using various statistical applications; and, pathway and fate evaluations for metallic and organic chemicals in soils and ground water.

GROUND WATER STUDIES

Mr. Bayer has directed and carried out ground water investigations involving contaminant source identification, determination of surface water and ground water interactions, investigation of complex bedrock ground water systems, identification and evaluation of compartmentalized ground water systems, and contaminant fate and transport. Investigational methods have included installation of monitor wells, piezometers, seep and spring measurements, and geologic mapping. He has experience with most drilling methods including conventional and reverse rotary, auger, wire line coring, and direct push.

OIL & GAS EXPLORATION AND DEVELOPMENT IMPACT ASSESSMENT

Mr. Bayer was a member of the technical team preparing the Environmental Impact Statement (EIS) for oil and gas leasing in the Uinta National Forest in Utah. JBR and Shipley Group were awarded this project in fall 2005. As part of the project management team, his role includes taking the lead in determining reasonably foreseeable development scenarios (RFDs); impacts to mineral and geologic resources other than oil and gas; and directing the compilation of geologic information for the EIS. Mr. Bayer's 6-8 years of experience on the Utah Board of Oil Gas and Mining have provided him with a unique understanding of the environmental challenges faced by both the oil and gas industry and the agencies that regulate them.

OIL SHALE & TAR SANDS PERMITTING & FEASIBILITY

Mr. Bayer is the currently managing the environmental component of a major pre-feasibility study for a potential large oil shale project located in eastern Utah. This confidential project involves assessing the environmental and socioeconomic aspects of a large mine and processing facility and the related operational infrastructure, as well as effects on community infrastructure. Mr. Bayer also participates as a senior advisor on other oil shale and tar sands permitting projects currently underway. He is an active participant in the Utah Mining Association's Oil Shale and Tar Sands Committee as well as being a regular participant in the Uinta Basin Oil and Gas Collaborative Group. Through these activities and his past membership in the Utah Board of Oil Gas and Mining, Mr. Bayer maintains a state-of-the industry understanding of all aspects of oil shale and tar sands, as well as conventional petroleum and natural gas E&P, technological, environmental, and public policy-related issues.



SITE INVESTIGATION, REMEDIATION, & CLOSURE PLANNING

Mr. Bayer has managed or participated in remediation and closure projects for industrial facilities, mines, and other contaminated sites in multiple western states, including Utah and Nevada. He is very experienced at assessing environmental conditions at operating and abandoned mine sites, in defining alternatives for reclamation or remediation, and in developing cost estimates for closure and remediation. He is also experienced in soil and ground water investigations and remediation planning for sites contaminated with hydrocarbons, including gasoline, diesel fuel, and solvents (PCE, TCE). Hydrocarbon-contaminated sites have included automobile service stations; dry cleaning; facilities; automobile and heavy truck service facilities; vehicle-painting facilities; fertilizer plants, and industrial gas production facilities.

Mr. Bayer has directed, managed, or conducted investigations of environmental contamination at numerous mining, milling, mineral processing, industrial, and commercial facilities in Utah, Nevada, California, Oregon, Missouri, Colorado, and Idaho. In addition to sites contaminated by hazardous wastes and petroleum products, Mr. Bayer has directed investigations of sites contaminated by mine waste rock, mine tailings, and metallic smelter wastes. He has planned and directed investigations of acid rock and acid mine drainage for various metallic mining sites and directed the assessment of acid-generating potential for coal mines. He has also managed pre-closure and closure work for an active Utah gold heap leach operation. Mr. Bayer has participated extensively in the evaluation of impacts to soils, surface and ground water, and biota from selenium leaching due to waste rock disposal practices in the Southeast Idaho Phosphate field.

AUDITING & DUE DILIGENCE

Mr. Bayer has managed and participated in environmental compliance audits and pre-acquisition due diligence projects for facilities in Nevada, Utah, Texas, Oklahoma, New Mexico, Colorado, California and Missouri. Facilities types have included surface and underground coal and metals mines; mills; smelters; oil and natural gas fields and gathering systems; natural gas plants; manufacturing operations; and large tracts of land, both undeveloped and tracts having abandoned mines and impacts from other former land uses.

EXHIBIT B

Relevant Experience

Ms. Knoop has extensive years of experience as a surface water hydrologist performing various aspects of hydrologic analysis. She has performed classical hydrologic studies for research, investigatory, environmental permitting, remediation, and impact assessment purposes. Ms. Knoop has generally focused on the hydrologic and hydraulic aspects of surface processes including runoff, erosion and sedimentation, and stream channel morphology. Her work encompasses the regulatory aspects of water resources as well, and she is experienced in the application of National Environmental Policy Act (NEPA), Clean Water Act (CWA), Section 404, and other related Federal and State water-related programs.

NEPA/ENVIRONMENTAL PERMITTING & COMPLIANCE

Ms. Knoop has contributed her expertise in hydrology to clients needing various types of permits including Utah Stream Alteration Permits, Corp of Engineers 404 permits, Water and Wastewater Discharge permits, ground water discharge permits, storm water permits, and other permit aspects related to water resources. She also manages and assists with projects that require operating permits for coal, mineral, and other mining activities in Utah. These projects include:

- Assisting various clients with compliance and permitting associated with NPDES programs, including special conditions associated with the Colorado River Salinity Control Forum and with 303(d)/TMDL-affected waters.
- Assessing width, riparian condition, and volume of fill for various crossings (roads, pipelines, etc.) for multiple projects. Permitting related aspects including design specifications, and special construction and maintenance stipulations to protect nearby water resources.
- Analyzing water quantity and quality in support of applications to discharge wastewater or storm water to waters of the U.S.
- Preparing and overseeing preparation of mine permit applications, notices of intent, and permit amendments for various types of mines in Utah. Coordinating with clients and state agencies in support of these permit activities.

As components of various projects, Ms. Knoop has assessed water resources in light of compliance with NEPA; State of Utah water rights regulations; federal

Areas of Expertise

NEPA/Environmental Permitting & Compliance
Hydrology & Geomorphology
Resource Monitoring & Management
Site Reclamation

Education

- B.S., Watershed Science, Utah State University, 1979

Professional History

- JBR Environmental Consultants, Inc., Hydrologist, 1997 - Present
- Great Basin Earth Science, Inc., Hydrologist, 1995 - 1997
- JBR Environmental Consultants, Inc., Hydrologist, 1988 - 1995
- Uintex Corporation, Hydrologist, 1981 - 1988
- Bureau of Land Management, Field Hydrologist, - 1981
- Oregon State University Forest Research Lab, Research Hydrologist, 1979 - 1980

Certifications

- Certified Professional Hydrologist

Affiliations

- American Institute of Hydrology
- American Water Resources Association



floodplain and flood mapping programs including Flood Insurance Studies; and waters of the U.S., 404 investigations, point source pollutant discharges, and other CWA programs.

HYDROLOGY & GEOMORPHOLOGY

Ms. Knoop has an extensive background in hydrology including modeling wildland and developed watersheds and flow systems; interpreting surface water and ground water interactions; conducting infiltration and seepage studies; analyzing regional and localized water resources for baseline investigations; applying statistical techniques to hydrologic evaluations; and classifying and/or rating stream channels using methods developed by Rosgen and others. Such projects include:

- Detailed rainfall-runoff modeling for design purposes.
- Water balance calculations for wetland mitigation planning.
- Flow frequency analysis for flood studies in large basins with diversions and flow regulation structures.
- Field investigations of perennial, intermittent, and ephemeral streams regarding channel stability, indirect discharge measurements, and channel type.
- Predicting and measuring soil loss and sediment yield.
- Evaluating in-stream sediment transport.
- Measuring and modeling scour and fill.
- Providing sediment source evaluations.
- Assessing impacts related to river crossings, road alignments, and other activities.
- Analyzing potential for water quality impacts as required for NEPA projects.

RESOURCE MONITORING & MANAGEMENT

Ms. Knoop has completed numerous projects related to tracking and maintaining the quality of surface water resources. These projects have included:

- Designing, evaluating, and implementing water monitoring programs.
- Investigating stream health using chemical, channel substrate, and macroinvertebrate indicators.
- Conducting studies on sediment/total dissolved solids/salinity relationships during storm runoff and base flows.
- Conducting statistical analyses and interpreting data from chemical and microbiological water quality monitoring programs.
- Investigating drinking water quality issues.
- Recommending or evaluating quality control-quality assurance procedures for water monitoring programs.

SITE RECLAMATION

Ms. Knoop is experienced in the following aspects of planning and design as they relate to overall site reclamation projects: creating stream channel restoration and drainage re-establishment plans; preparing runoff and erosion control plans; designing wetland creation/enhancement projects for loss mitigation; and designing sedimentation ponds, lined and unlined channels, spillways, slope treatments, drop structures, and similar types of structures. Projects include:

- Designing a juniper revetment structure to protect a stream-side reclamation project, allow degraded channel banks to rebuild, and prevent channel migration which could expose coal materials.
- Preparing design drawings and accompanying text in support of a stream relocation permit to alter the course of two small perennial streams.
- Providing complete hydrologic, hydraulic, construction specifications, and permitting aspects of runoff control plans for industrial facilities.